

# Designated Erosion Control Inspector (DECI) Inspections – A Walk Through

Nikki Pisula, PWS, CWS, CPESC, DECI

# DECI Inspections

- **What? – Stormwater inspections**
- **Why? – Permit compliance**
- **When? – Prior to construction to stabilization**
- **Where? – Development**
- **Who? – Qualified personnel (i.e., DECI)**

# Types of Inspections

1. **Pre-construction Soil Erosion and Sediment Control (SESC) Installation**
2. **Weekly Inspections**
3. **Established Site/New Inspector**
4. **Post Rain Inspections**
5. **Final stabilization**



# Considerations - PTCR

- 1. Preparation**
- 2. Travel/timing**
- 3. Communication**
- 4. Routine**



# 1. Preparation

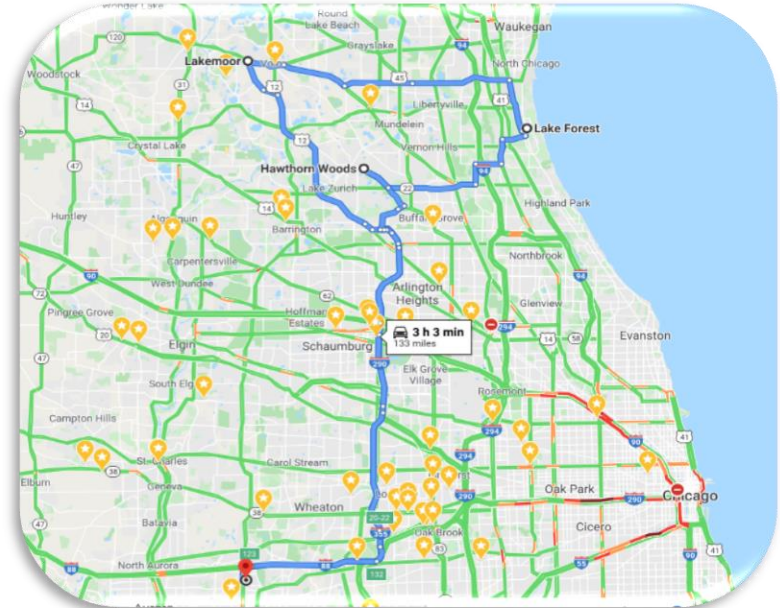


- Budget appropriately
- Review permit documents
- Print plans and highlight SESC measures
- Attend pre-con meeting
  - Add your applicant, Enforcement Officer, SMC contact numbers to your phone
- Determine a qualified “fill-in” DECI inspector in case you are unavailable
- Get a soil test done
- Keep tools & safety gear in your car
- **Get on Bob G’s list!!!!**

## 2. Travel/timing



- Aim to inspect during working hours
- Work hours will vary contractor to contractor
- If you are a DECI on multiple projects, schedule your inspections in an order that maximizes travel time.



# 3. Communication

- **Contractor**

- Do not avoid the contractor
- Face-to-face time critical
  - Information Exchange
  - Maintain Relationship
  - Positive Reinforcement
  - Are Resources Needed?
  - Offer Support



# 3. Communication Cont'd

- **Agencies/Enforcement Officers (EO)**
- After the pre-con meeting, send a follow-up email to the appropriate agencies and EO
- Email inspection forms and give updates (e.g. new stage of construction, dewatering, contractor repairs)
- Let them know if you go on vacation or are sick and that someone is filling in and provide the contact information for the substitute  
DECI





# 4. Establishing a Routine

- **Recommend inspecting the same path each time.**
  - Changes will stand out
  - Increases efficiency
- **Take photos at “picture points”**
  - This will make it easy for you, subs, or agencies to compare different site visits.
  - Helps give reviewer of inspection form an idea of how the site changed from inspection to inspection.
  - “Before” photos are important for FERC annual reports
  - Important for project close-outs



# **Pre-Construction SESC Installation Inspection**

# Pre-construction SESC Installation

1. SWPPP
2. Construction Entrance
3. Silt Fence
4. Inlet Protection
5. Porta Potty
6. Concrete Washout
7. Basins/Sediment Traps
7. Outfall



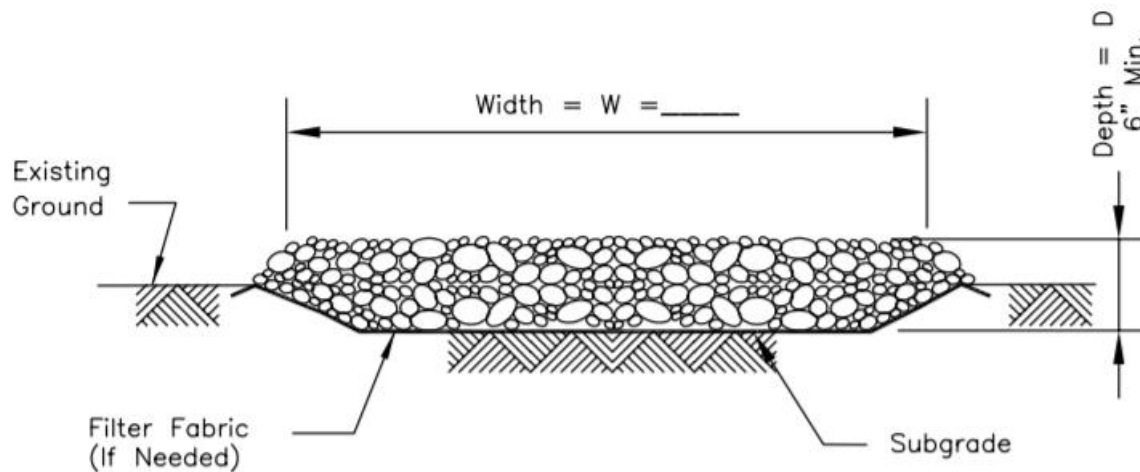
# Pre-construction SESC Installation

- **SWPPP**
- Visible?
- Is it accessible to everyone?
- Is it updated?
- Certifications signed?
- Permits included?



# Pre-construction SESC Installation

- **Construction Entrances**
- Situated in the correct locations?
- Geotextile fabric beneath?
- Correct size stone?
- Sized correctly?



SECTION A-A



# Pre-construction SESC Installation

- Can you pull up the silt fence?
- Perform a “thumb test”
- Compacted?
- Stakes facing the correct direction?
- Stakes spaced correctly?
- Can you see the green line at the bottom?



# Pre-construction SESC Installation

- **Inlet protection**
- Was the correct type inlet protection purchased?
- Located as shown in the erosion control plan?
- **Mark-off as you go**
- Do you think additional protection is needed?
- Should be pretty quick as construction activities should not have started



# Pre-construction SESC Installation

- **Porta potty**
- Located away from inlets?
- Secured?

**This happens  
more than you  
think!**





# Pre-construction SESC Installation

- **Concrete washout**
- Containers available?
  - If not, constructed per the Illinois Urban Manual?
- Located in the specified location per the erosion control plan?
- Is there a sign that makes it easy for contractors to identify this location?



Source: <https://illinoisurbanmanual.org/gallery/>

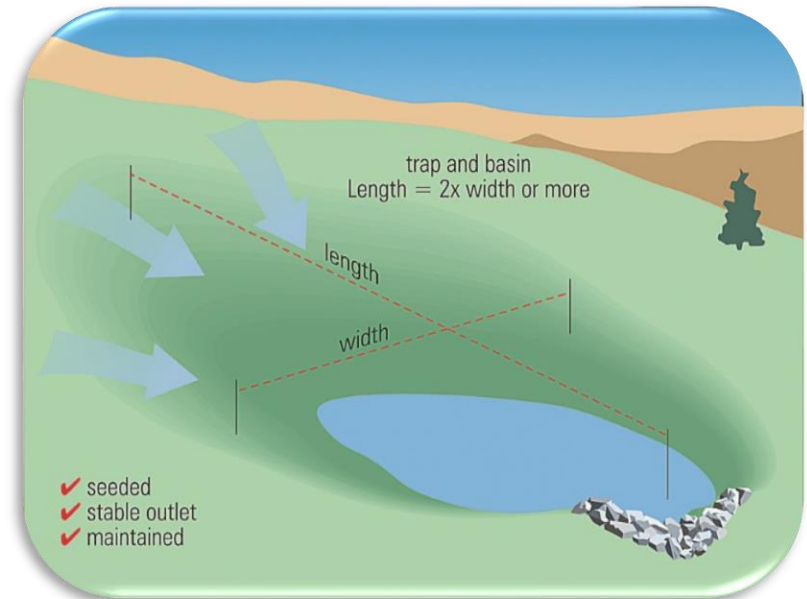


# Pre-construction SESC Installation

- **Temporary Basins/Traps**
- Ideally should allow for settling of 70-80% of coarse sediment (sand and heavy silt)
- Constructed properly? No short circuiting (use baffles!)



Source: Minnesota Stormwater Manual



Source: IEPA

- Vegetation along embankments?
- Dewatering Plan in place?
- Emergency overflows constructed?



# Pre-construction SESC Installation

- **Temporary Basins/Traps**
- Know the storage requirements.
- **Depth of storage 2 feet (minimum)**
  - Perforated riser (PF, 6 inch min-12 inch max)
    - Polymerizing vinyl chloride (PVC) wrapped wire 1-2 away from pipe first then non-geotextile fabric
    - Rock at base
    - Mortared in (verify with surveyors)
    - Wire over top of PF (trash rack)
    - Height @ top of dry storage
- Forebays are your friend to reduce finer sediment.



**Energy dissipation needed!**



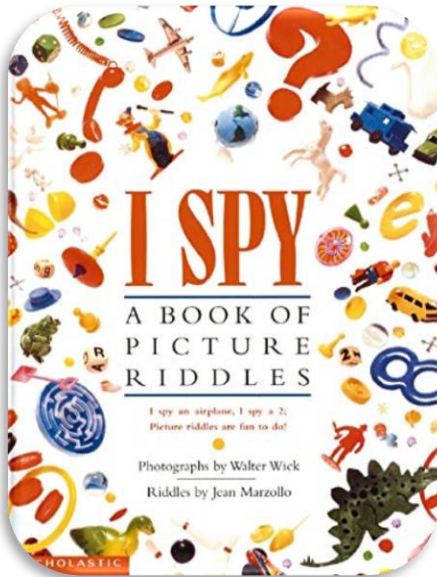
# Weekly Inspections





# Weekly Inspections

- **Main Objective – SESC measures are functioning/site is maintained**
- First observations are critical
- Does the site look similar to the last time you inspected?
  - If not, address according to level of importance
  - Stop and immediately address occurring non-compliant activities
    - ❖ Talk to the contractor and address (you may need to stop work)
    - ❖ Notify agencies of egregious issues
    - ❖ Notify applicant
    - ❖ Document
  - Once resolved, proceed to your routine



# Weekly Inspections

- What is wrong with these pictures?



# Weekly Inspections

- Review prior DECI report before inspection
- First stop – SWPPP
- Inspect small to big, e.g., road -> inlets -> basins -> outfall
- Use SMC DECI form as a guide





# Weekly Inspections

1. Housekeeping – trash picked up?
2. **Roads (track-out)**
3. **Construction entrance (present/absent)**
4. **Inlets (clogged/damaged/not protected)**
5. Soil stockpile (silt fence/stabilized)
6. General condition of soil onsite (stabilized/exposed)
7. Concrete washout (maintained, location)
8. Porta potty (secure/away from inlets)
9. **Erosion Control Blanket**
10. Outfalls



# Weekly Inspections

- **Roads (track-out)**
- Do not allow stockpile in the road
- Confirm street sweeping schedule
- Does street sweeping need to be increased?



# Weekly Inspections

- **Construction Entrances**
- More stone needed?
- Sediment accumulated?
- Advise when to remove and top-dress entrances
- Any areas where you suggest an add'l entrance/exit?
  - Update SWPPP





# Weekly Inspections

- **Inlet Protection**
- Clogged?
- Are there holes?
- Is the area around the inlets caked in mud?
- Confirm inlet protection is located in all locations specified in erosion control plan
- Are the inlets covered with leaves?





# Weekly Inspections

- **Concrete Washout**
- Is concrete washout full?
- Spilling?
- Located away from inlets?
- Signage present?
- Additional containers needed?



# Weekly Inspections

- **Erosion Control Blanket**
- Can you easily pick it up?
  - Yes? Not enough staples
- Gaps between blankets?
- Oriented correctly?
- Seed underneath?
- Additional containers needed?
- Keyed in?



# Weekly Inspections



- **Stabilization**
- Are temporary stabilization efforts occurring if activity has ceased 7 days in disturbed areas?
- Does the vegetation appear to be growing?
- Is tackifier, **topsoil**, or amendment needed?
- Are additional areas ready for stabilization?

# Established Site Inspections

For substitute DECI's or DECI's inheriting a project





# Established Site/New Inspector

- Contact previous DECI or applicant to go over the information from the pre-construction meeting
- Plan on spending more time during your initial inspections or when mass grading is occurring
- “Learn” the site
- Be more diligent in the beginning (set the tone for what is acceptable and what is not)
- Figure out your routine
- Ask questions

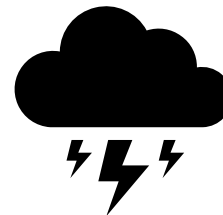


# Post Rain Inspections



# Post Rain Inspections

- **Main Objective: Inspect offsite discharge points**
  - Evaluate if your BMPs are working
- Check-in with contractor and see what the plan is or give direction
- Note items that have/have not been addressed
- Focus on large scale measures (basins)
- Must evaluate the discharge point
- Use your turbidity meter



# Post Rain Inspections Cont'd

- Note violations & contact applicant/EO/agencies
- Be pro-active – anticipate dewatering, remind contractors of permit requirements







**Final Stabilization**

# Final Stabilization



- **Main Objective: Determine adequate cover**
- Review plans first!
  - Mark disturbed areas
- Ensure 90% vegetative cover across all disturbed areas (not 90% in one area and 10% in another)
- Is the right vegetation installed?
- Record all deficient areas with photos and be prepared to communicate deficiencies
- What BMPs be removed, left in place, or converted?

# Final Stabilization



- What BMPs be removed, left in place, or converted?
- **REMOVE** – inlet protection, perimeter controls, temporary stream crossings
- **LEFT IN PLACE** – degradable check dams, temporary/permanent seeding, riprap (varies), mulch
- **CONVERTED** – temporary basins/traps -> permanent ponds/basins
- *Not sure? Review the SWPPP!*



# Other Helpful Hints

- Do not be afraid of the occasional face-to-face meeting
- Request receipts!
- Offer additional inspections (during hydromulch application)
- Consider the time of year when you are inspecting.
  - Contractors cannot install silt fence in frozen ground. (Do not say “not my problem”)
- Anticipate that in spring you will be spending more time onsite given freeze-thaw fluctuations
- Make sure the contractors come back and remove silt fence after stabilization has been achieved!
- Keep an open mind!



# Questions?

## Thank you!

**Nikki Pisula**

**Project Manager**

**Weaver Consultants Group  
1316 Bond Street | Suite 108**

**Naperville, IL 60563**

**O: 630-687-6207 | F: 630-717-4850 |**

**M: 224-423-3487**

**[www.wcgrp.com](http://www.wcgrp.com) | [npisula@wcgrp.com](mailto:npisula@wcgrp.com)**